

PATENT ABSTRACTS OF JAPAN

(11)Publication number : 2001-069749
 (43)Date of publication of application : 16.03.2001

(51)Int.CI. H02M 3/155

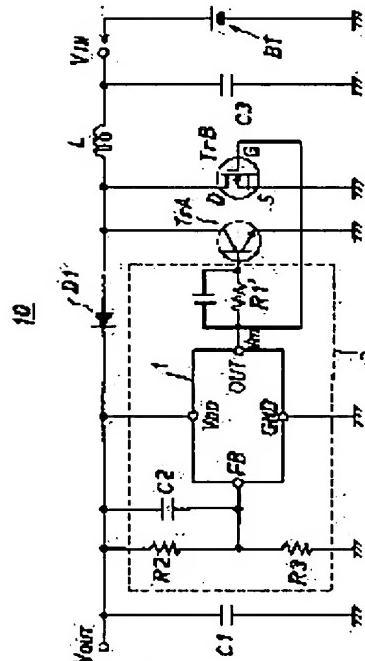
(21)Application number : 11-243111 (71)Applicant : VICTOR CO OF JAPAN LTD
 (22)Date of filing : 30.08.1999 (72)Inventor : HAMANO TATSUYA

(54) SWITCHING REGULATOR

(57)Abstract:

PROBLEM TO BE SOLVED: To increase the life of a battery by reducing reactive current in a DC power circuit for a portable (recording-) playback device such as CD and MD.

SOLUTION: This switching regulator 10 is of chopper system involving a coil L and a diode D1 connected in series with the positive side of a DC power source BT, a PWM pulse control part 3, a bipolar transistor TrA connected in parallel with the DC power supply BT through the coil L and switched by the pulse output of the PWM pulse controlling part 3, and a capacitor C1 connected in parallel with an output VOUT. A source S and a drain D are also connected in parallel with the bipolar transistor TrA, and an FET (TrB) having the pulse output of the PWM pulse control part 3 connected with a gate G is inserted additionally. When one battery is actuated to serve as a DC power source BT, the TrA starts switching, and after boosting operation, TrB performs switching to supply DC current to a load and the base current IB of the TrA is reduced as soon as possible, thereby reducing reactive current substantially during standby and playback operations.



LEGAL STATUS

[Date of request for examination] 26.04.2002

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's decision of rejection]

[Date of requesting appeal against examiner's